Industrial Rail Access Program (IRAP)

Application For Assistance

Project Solicitation Closing at 12:00 Noon, February 21, 2020

Name of Applicant: _____

Contact person: _____

Title: _____

Phone No.: (____) -_ ___-_____

E-mail: _____

Maine Department of Transportation
Office of Freight Transportation
16 State House Station
Augusta, Maine 04333-0016
(207) 624-3560

INDUSTRIAL RAIL ACCESS PROGRAM

Purpose

The Industrial Rail Access Program (IRAP) provides financial assistance for investment in rail or rail-related infrastructure located on, within or adjacent to the general railroad system. The intent of the Program is to stimulate economic and employment growth through generation of new or expanded rail service; to preserve essential rail service where economically viable; and to enhance intermodal transportation.

Program Administration

The Office of Freight Transportation is charged with the administration of monies allocated to the IRAP. Financial assistance is available on a grant basis to owners, users and potential users of rail infrastructure whose proposals, at a minimum, meet certain project eligibility requirements. Because the dollar value of requests for state financial assistance is anticipated to exceed available funding, not all project applications will receive funding assistance. The Freight Office is responsible for the timely evaluation of project applications and the awarding of state financial assistance based upon an objective process that serves the intent of the IRAP, meets the needs of the Department, is consistent with the Integrated Freight Plan, and promotes the public interest.

Currently, approximately $1,250,000 in Federal/State funding for the IRAP program is being made available beginning March 2020 from the State Multimodal Account and State Bond funding.

Applicants

Applications can be submitted by private sector businesses, railroad companies, municipalities, counties, and non-profit organizations wishing to avail themselves of rail freight transportation.

Eligible Projects

Projects may fall into four categories: rehabilitation, new rail infrastructure, intermodal improvements, and equipment acquisitions. These categories are defined as follows:

Rehabilitation: The replacing of ties and other track and structural materials in quantities sufficient functionally to upgrade a railroad line to a level necessary for compliance with a higher Federal Railroad Administration class track safety standard for ten years after completion of the project.

New rail infrastructure (capital project): Acquisition of property or equipping, constructing, reconstructing, rehabilitating, or improving rail transportation systems or facilities.

Intermodal improvements: capital improvements that allow the transfer of goods and materials to/from rail to other modes of transportation.

Equipment acquisitions: Acquisition of equipment for improving the ability to use rail transportation systems or facilities to enhance intermodal movement of goods.

> NOTE: The last two categories are intended to encompass all manner of facilities that will assist in the transfer of goods between different modes of transportation. Such facilities include, but are not limited to, loading ramps for access to railcars by forklift or other means, conveyors belts, and pipelines. Applicants are encouraged to be innovative when applying under this category.

MAINEDOT Evaluation of Project Applications

The Freight Office's evaluation and selection process utilizes criteria reflecting the intent of the IRAP, the priority initiatives of the state and the limitations on availability of state funding. Successful applications will demonstrate the public benefits of their proposed project in terms of:

(1) transportation and logistics cost savings for rail users.

(2) employment and economic development opportunities for rail users and the community served by rail.

(3) benefit-cost ratio justifying expenditure of public funds.

(4) the significance of the project for continuous and productive improvement of rail service levels.

(5) benefits accruing to the general public through decreased air emissions, decreased highway maintenance requirements, decreased dependence on foreign oil, or decreased levels of highway congestion.

A more competitive ranking will be given if a project contains any of the following attributes:

(6) Economic development: a construction or reconstruction project that generates new employment and investment in the state; that opens up new economic markets due to decreased shipping costs, enhanced service, and/or improved transit times; and that will make Maine more competitive in the global marketplace.

(7) Intermodal: a project that shows transportation efficiencies through use of an intermodal transfer facility including, but not limited to, bulk transfer, trailer-on-flatcar, container-on-flatcar, etc.

(8) Private investment: a greater than 50% share of project costs to be assumed by the applicant.

The evaluation and selection process will also consider the readiness of the project for implementation, the viability of the rail carrier providing the service, and the financial need of the applicant

Matching Funds

IRAP will provide financial assistance up to 50% of total eligible project cost, but may provide assistance for a project of lesser value than applied for, depending upon availability of funds and total assistance applied for. Commitment letters showing current availability (or when matching funds will be available) and commitment for the non-state share of the project must be submitted with the application.

Site Inspection and Project Commencement

For successful grant applications, a joint MaineDOT and applicant inspection of the proposed project will be required prior to contract execution. No project work shall begin prior to state approval, site inspection and environmental evaluation.

Follow-up Evaluation

MaineDOT will conduct follow-up evaluations of projects receiving state funding. These evaluations will assist the Freight Office in monitoring IRAP performance and investment strategy.

APPLICATION INSTRUCTIONS

General

All requests for financial assistance from the Maine Department of Transportation's Industrial Rail Access Program should be made on the attached application. An original and three (3) copies should accompany each project application. **Applications are due no later than 12:00 Noon on 02/22/2020.**

All applications are to be submitted to Brian Reeves, Office of Freight & Business Services, Maine Department of Transportation, 16 State House Station, Augusta, Maine 04333. Applications will also be accepted electronically at Brian.J.Reeves@maine.gov. If assistance is required to complete the application, please contact the Freight Office at (207) 624-3042. **Applications that do not contain all requested information may not be processed**.

The individual forms which make up the application will provide specific types of information needed to make decisions on project awards. If the applicant has additional information not specifically called for in the application that strengthens or clarifies the application, they are encouraged to submit that material. Likewise, the Freight Office reserves the right to request additional information or clarification from the applicant.

The application format has been designed for projects involving some form of trackwork. Should the applicant be applying for a non-track related project, details and cost items should be identified and explained sufficiently to allow the Freight Office to make informed decisions. Should the applicant wish to conduct a project involving passenger operations, then additional information, beyond that identified within, should be included, which deals with signal and train control, project requirements, cost and proposed post-project maintenance.

Each application must be accompanied by the following:

ATTACHMENT A: Summary Application (cover page to application)
ATTACHMENT B: Project Description and Cost Estimates (with site plan, track chart, or valuation map)
ATTACHMENT C: Rail Carrier Survey
ATTACHMENT D: Rail Freight Shipper/Receiver Surveys
ATTACHMENT E: Benefit-Cost Analysis

Application Timetable

Applications must be received by the Freight Office no later than 12:00 Noon, Friday, February 22, 2020. The Freight Office will review/score applications and select projects for funding as soon thereafter as possible.

ATTACHMENT A: SUMMARY APPLICATION

|Project NO: _____
|
|Date Received: _____
| (MAINEDOT use only) |

1. Name of Applicant: _____ FEIN: _____

2. Address of applicant: _____

3. Contact person and title: Name: _____ Phone No.: _____

   Title: _____ FAX No.: _____

   e-mail: _____

4. Total project cost: $ _____ Proposed Start date: _____

   Completion date: _____

5. Sources of funding: Percent of project cost

   IRAP: $ _____ % _____

   Others:
   1. _____ $ _____ % _____
   2. _____ $ _____ % _____
   3. _____ $ _____ % _____

6. Project location (limits): Municipalities/counties affected

   Length:
   Milepost From:
   To:

   1. _____/_____
   2. _____/_____
   3. _____/_____
   4. _____/_____

7. Please give a brief description of the proposed project. (Attach additional sheets if necessary)

8. Current and post-project FRA track classification.

9. Please identify the nature of the applicant's business, the size and scope of the project in relation to the applicant's total operations, and the strategic importance of the project to the applicant's specific operations that benefit from the project. (Use separate sheet if necessary)

The applicant warrants that all information associated with this application is true and correct and that the applicant has the identified private/local project match to begin the project by May 1, 2020 and construction plans to complete the project by December 2021, should this application be funded.

Signature: _____ Title: _____

Name (Please print): _____ Date: _____

ATTACHMENT B: PROJECT DESCRIPTION AND COST ESTIMATES

Please describe in detail the proposed project for which you are requesting state financial assistance. This description should begin with a report of the current physical condition of the rail facilities within the project limits, including operating speed limits. A site plan, track chart, or valuation map must be attached. A map showing the project location and the location of the major shipper(s), if applicable, affected by the rail project should also be attached. If the applicant is <u>not</u> a rail carrier, provide the name of the carrier that will provide rail service. Please describe how project cost estimates were developed, such as by bid, solicitation, or other means. Provide specific itemized project cost estimates on the following page.

What is the applicant's 10-year maintenance/rehabilitation plan/schedule?

How does the proposed project fit into this plan/schedule?

Does the applicant own the property within the project limits or have a long-term lease on the right-of-way?

Neither ____ Own ____ Lease ____ Lease Term: _____

If neither, how will applicant accomplish project goals?

Is the applicant involved in any litigation, threatened litigation, delinquencies, or liens that may have an impact upon the proposed project?

Yes ____ No ____

If yes, please explain the scope and the potential impact upon the project.

Project Cost Estimates

Item	Description	Quantities	Estimated Unit Cost	Total Item Cost
1	Cross Ties Size _____	_____ each	$ _____	$ _____
2	Switch Ties[1]	_____ linear foot	$ _____	$ _____
3	Rail Weight _____	_____ linear foot	$ _____	$ _____
4	Tighten Joint Bar Assemblies	_____ each	$ _____	$ _____
5	Raise, Line and Surface	_____ track feet	$ _____	$ _____
6	Spot Surface	_____ track feet	$ _____	$ _____
7	Bridge Deck Repair[2] (Bridge Timbers) Size _____	_____ each Mileposts _____, _____, _____	$ _____	$ _____
8	Road Crossing Rebuilding[3]	_____ linear foot	$ _____	$ _____
9	Ditching	_____ linear foot	$ _____	$ _____
10	Brush Cutting	_____ acres	$ _____	$ _____
11	Weed Spray	_____ acres	$ _____	$ _____
12	Track Construction	_____ track feet	$ _____	$ _____
13	Switches	_____ each	$ _____	$ _____

List any additional or non-track related items on separate sheet(s) using same format as above

Total of additional items $ _____

RR INFRASTRUCTURE PROJECT COST $ _____

[1]Indicate number and length of switch ties for each switch on separate sheet(s)

[2]If more than one location, indicate on separate sheet(s).

[3]Indicate location and length of each road crossing on a separate sheet(s).

Project costs not track related:

Type of Equipment/Quantity	**Unit Cost**	**Total Cost**
1.	_____	_____
2.	_____	_____
3.	_____	_____
TOTAL EQUIPMENT COST		$_____
TOTAL IRAP PROJECT COSTS		***$***_____

ATTACHMENT C: RAILROAD SURVEY

(To be completed by the rail carrier providing service over or to the proposed project)

1. Name of railroad: _____ FEIN: _____

2. Address of railroad: _____

3. Contact person and title: Name: _____ Phone No.: _____

Title: _____ FAX No.: _____

1. Describe how essential the proposed project is for maintaining current rail service quality levels within the project limits during the next two years.

2. For the rail branch line affected by the project, how much of the **current** annual rail traffic utilizes the portion of track or facilities scheduled for improvement by the proposed project? _____ carloads. What percent do these carloads represent of total current carloads on the branch line? _____ percent.

3. Please describe the relative importance of state financial assistance to the completion of the proposed project by 2021.

4. How many rail carloads do you estimate will be generated in 2022 by the proposed project, assuming it is completed in the preceding year? _____ carloads. What percent would this generated traffic represent of **current** annual carloads carried on the branch line serving the proposed project. ____ percent.

ATTACHMENT D: RAIL FREIGHT SHIPPER/RECEIVER SURVEY

(To be completed by each affected shipper/receiver served by the proposed project)

1. Name of shipper: _____ FEIN: _____

2. Address of shipper: _____

3. Contact person and title: Name: _____ Phone No.: _____

Title: _____ FAX No.: _____

Employment Impacts

1. Is the facility to be served by the proposed rail project an existing, recently relocated, or new facility?

Existing _____ Relocated _____ New _____

2. What is the current (estimate if new facility) full-time equivalent employment at the facility to be served by the proposed project?

2020 full-time equivalent employment: _____

3. What do you expect full-time equivalent employment and salaries and wages at this facility to be in the year following completion of the rail project?

Estimated 2021 full-time equivalent employment: _____

Estimated 2021 total salaries and wages: _____

If there is an increase in employment over current levels, please explain:

4. What impacts, if any, would occur at this facility if the proposed project is **not** completed by 2021?

5. Is rail service necessary for preservation of existing full-time equivalent employment levels at the affected facility on the rail line of the proposed project? Please explain your response.

6. Please indicate any other economic development related values of the proposed project.

Transportation/Logistics Cost Impacts

7. Will completion of the proposed rail project result in some **diversion** of your **current** annual freight traffic from other modes to rail transportation?
Yes ____ No ____ N/A ____ (newly located facility)

If yes, please estimate or explain the following:

A. The change in your annual transportation costs due to this traffic diversion. $ _____

B. The impact the traffic diversion may have on other logistics-related operations and costs.

C. Estimated quantities diverted (by mode).

8. At presently **existing facilities**, how many annual rail carloads of **newly generated** freight traffic (i.e., traffic that previously did not exist and would not exist without the rail project) do you estimate will be transported in 2021 due to completion of the proposed rail project? _____ carloads. Please explain.

9. If the proposed rail project is to serve a **new facility** (manufacturing plant, distribution center, etc.), please explain the significance of the rail project in terms of transportation and other logistics-related cost impacts.

10. Please identify and explain other significant transportation and logistics cost or service quality impacts that the proposed project may have. Particularly, what is the impact on the operations of your facility if the proposed rail project is **not** completed?

ATTACHMENT E: BENEFIT-COST ANALYSIS

Develop Benefit-Cost Analysis using the following methodology:

BENEFIT-COST METHODOLOGY
FOR
THE LOCAL RAIL FREIGHT ASSISTANCE PROGRAM

Benefit/Costs Analysis (BCA) is one type of economic valuation – an analysis that assesses the relative value of a project in monetized estimates. As the name implies, BCA determines the value of a project by dividing the incremental monetized benefits related to a project by the incremental costs of that project. The result is called the Benefit/Cost Ratio and is often the primary output of the analysis process. This output may either be expressed as a ratio (2:1) or a resultant value (2).

The methodology is on the Office of Freight Transportation website in the IRAP section. **All applicants shall use a 10-year period and discount rate of 6 percent**. The Benefit-Cost Analysis must be completed and submitted with the IRAP application as Exhibit E. Applicants are encouraged to utilize the Federal Rail Administrations Benefit-Cost Analysis Guidance for Rail Projects (https://www.fra.dot.gov/Elib/Document/16837).

MAINE DEPARTMENT OF TRANSPORTATION
TRACKWORK INSPECTION CRITERIA

The purpose of these trackwork inspection criteria is to provide minimum material and workmanship requirements for common construction items identified in typical track rehabilitation or construction contracts involving Department participation.

GENERAL

Upon completion of any work, all rubbish, waste, old ties, or any other waste material removed from tracks shall be cleaned up and properly disposed of.

Unless specified in these criteria, track material and workmanship shall conform to AREMA specifications, be free of defects and of the proper size. Deviations shall be approved by the Department.

Ballast (crushed stone) must be free of screenings, dirt and foreign matter. Gradation shall comply as follows:

SIZE NO.	PERCENT PASSING						
	2-1/2"	2"	1-1/2"	1"	3/4"	1/2"	3/8"
AREMA No. 3/AASHTO 3	100	95-100	35-70	0-15	0-5		
AREMA No. 4	100	90-100	20-55	0-15	0-5		

All bituminous material used for highway grade crossings shall be suitable for permanent construction and repairs and be similar in type and durability to materials used by local, county and state highway departments in the area, and shall conform to MAINEDOT Standard Specifications.

ITEM 1 - CROSS TIES

DESCRIPTION: This work shall consist of furnishing and distributing the required number of ties, installation of replacement ties, removal of and disposal of defective ties, replacement of tie plates, spiking of the replacement ties, tamping, replacement of rail anchors, and dressing of ballast.

MATERIAL: Ties shall be oak and mixed hardwoods and conform to AREMA specifications. **Ties shall not be industrial grade, plant rejects, or relays unless written permission is received from the Department**. New treated cross ties will be installed and shall measure a minimum of 6" X 8" X 8' - 6", except that ties may have tolerance of -1/4" to +3/4" width and height and be 1" shorter or longer than the length of 8' - 6". Crossties shall be treated with a 60/40 creosote-coal tar solution. Retention shall be no less than 7 pounds of solution per cubic foot of material. Treatment reports shall be provided if requested.

WORKMANSHIP: All ties will be placed with the heartwood face down, square with the line of rail and approximately centered with the track. Replaced ties shall be brought up tight against the base of the rail and/or tie plate and be tamped with an appropriate device. Ties shall be handled with tie tongs or an approved mechanical device. The use of a pick is not allowed. All replacement ties shall be spiked to the standard gage of 56 1/2" plus 1/2". In areas where ties are spotted in, existing ties shall be respiked within the above gauge specifications. Where spikes are withdrawn, the holes in the tie must be plugged with a creosoted tie plug or epoxy hole filler. Spikes shall be driven vertically and square

against the rail and driven to allow 1/8" to 3/16" space between the spike head underside and top of rail base. Tie plates shall be centered on the tie under the rail with the base of the rail bearing firmly against the tie plate. Under no circumstances shall the shoulder of the plate be under the base of the rail. Rail anchors disturbed as a result of the work shall be reinstalled as per existing anchor pattern.

METHOD OF MEASUREMENT: This item will be measured by a unit for each tie properly installed.

ITEM 2 - SWITCH TIES

DESCRIPTION: This work consists of furnishing and distributing switch ties, removing and disposing of defective switch ties, installation of replacement switch parts and tie plates as required, spiking, tamping, and dressing ballast.

MATERIAL: Switch ties shall be oak and mixed hardwoods and conform to AREMA specifications. Material and treatment shall be the same as for crossties.

WORKMANSHIP: Workmanship as described in Item 1 applies. Also the distance from the field side base of rail to the end of tie shall be in the range of 13" - 24" for both ends of the switch tie.

METHOD OF MEASUREMENT: This item will be measured by the number of linear feet of switch ties installed and accepted.

ITEM 3 - RAIL

DESCRIPTION: This work consists of furnishing and distributing required length of rail, rail installation, disposal of replaced rail, tie plate installation, spiking, and rail anchor installation.

MATERIAL: Rail shall conform to AREMA specifications and be of the same or greater weight and section as that being replaced. Rail less than 14' may not be used as replacement rail. Rail bought for the project shall not exceed the allowable wear specified for Class III rail in the AREMA manual.

WORKMANSHIP: When required, rail shall be cut with a saw and new bolt holes drilled. A torch shall not be used for these operations. Rail end mismatch greater than 3/16" shall have the lower rail built up with welded metal so that the rail end mismatch on the tread and gage side is less than 1/8". Proper welding specifications shall be determined by the contractor performing the welding operation and shall be acceptable to the Department. All rail shall be laid to the standard gage of 56 1/2" plus 1/2". For securing the rail to the ties, workmanship as described in Item 1 applies.

METHOD OF MEASUREMENT This item will be measured and accepted by the number of linear feet of rail installed and accepted.

ITEM 4 - CONTINUOUS WELDED RAIL (CWR)

DESCRIPTION: This work consists of furnishing and distributing required length of CWR, rail installation, disposal of replaced rail, tie plate installation, spiking, and rail anchor installation.

MATERIAL: CWR shall conform to AREMA specifications and be of same or greater weight and section as that being replaced. Repair rail less than 18' may not be welded into existing CWR.

WORKMANSHIP: Work shall comply with AREMA specifications. CWR shall not have holes closer than 4 1/2" to the weld. All tie holes shall be plugged with treated plugs. All CWR rail shall be laid and

adjusted (destressed) to AREMA standards for standard gage of 56 1/2". Every tie shall be box anchored for 200' beyond each bolted end of the CWR strings, each end of road crossings, and each end of switches. Ballast shall extend beyond the tie ends at least 12". When required, rail shall be cut with a saw and new bolt holes drilled; a torch shall not be used for these operations. The end of the replacement rail shall, when necessary, be ground or built up with welded metal so that the rail end mismatch on the tread and gage side is less than 1/8". Proper welding specifications shall be determined by the contractor performing the welding operation and shall be acceptable to the Department. For securing the rail, workmanship as described in Item 1 applies.

Item 5 - TIGHTENING JOINT BAR ASSEMBLIES

DESCRIPTION: This work consists of tightening all loose joint bolts and replacing damaged, defective or missing bolts or joint bars to provide a minimum of four (4) effective bolts per joint.

MATERIAL: All joint bars and fittings shall conform to AREMA specifications and be free of defects. Track bolts and nut locks shall be new and of the specified size for the section and drilling.

WORKMANSHIP: Bolts that cannot be tightened must be replaced with new bolt sets. Joint bars that are bent or broken through a bolt hole or between the middle two bolt holes shall be replaced. All joint bar assemblies shall be drilled and not cut with a torch. Where there are six (6) hole joint bars all holes shall be filled if holes are drilled.

METHOD OF MEASUREMENT: This item will be measured by the joint bar assemblies tightened per track mile.

ITEM 6 - RAISING, LINING AND SURFACING

DESCRIPTION: This work consists of raising, lining and leveling the track to specifications; installing ballast; spiking and tamping all ties; and regulating ballast.

MATERIAL: Ballast shall conform to AREMA No. 3/AASHTO No. 3 or AREMA No. 4 specifications.

WORKMANSHIP: Adequate ballast for dressing to the proper cross section should be distributed in advance of raising. Work should be done in accordance with AREMA specifications. All spikes should be driven home, taking care not to overdrive. All ties must have a tight bearing against the base of the rail and/or tie plate. Ballast must be regulated and dressed after surfacing and lining are completed.

METHOD OF MEASUREMENT: This item will be measured by the track feet surfaced and accepted.

ITEM 7 - SPOT SURFACING

DESCRIPTION: This work consists of installing the necessary ballast, tamping all low spots, sink holes, and down ties, and respiking improperly spiked ties and realigning track areas where needed.

MATERIAL: Ballast shall conform to AREMA No. 3/AASHTO No. 3 or AREMA No. 4 specifications.

WORKMANSHIP: All cribs are to be filled with ballast and ties tamped up tightly to the base of rail. Down ties are to be plugged, respiked, and tamped up tightly to the base of rail. Work area must be properly dressed after completion of surfacing.

METHOD OF MEASUREMENT: This item will be measured by the actual number of track feet spot surfaced and accepted.

ITEM 8 - BRIDGE DECK REPAIR

DESCRIPTION: This work consists of furnishing and distributing bridge ties, removing and disposing of defective ties, installing replacement ties, reinstalling tie plates, spiking, installing tie bolts, and installing tie spacer bar/timber.

MATERIAL: All material shall conform to AREMA specifications.

WORKMANSHIP: New properly treated bridge ties of the same size shall be used unless otherwise specified. Bridge ties shall be dapped and fitted to support the running rails at the proper grade and elevation across the entire length of the bridge. Workmanship in Item 1 applies where practicable.

METHOD OF MEASUREMENT: This item will be measured by the number of bridge ties installed and accepted.

ITEM 9 - ROAD CROSSING REBUILDING

DESCRIPTION: Work shall consist of obtaining the necessary approval from the proper highway authority; providing proper protection to the public; providing for detour as required; and assuring construction to MAINEDOT Standards for Federal Grade Crossing Safety Improvement projects.

MATERIAL All materials shall comply with AREMA specifications, except for bituminous materials, which shall comply with local, county, or state highway departments in the location of work.

WORKMANSHIP: Ties installed shall be tamped firmly against the base of the rail on a bed of new ballast of the required depth. Workmanship in Item 1 applies. After track is brought to the proper line and surface, coarse grade blacktop will be placed within the roadway limits of the crossing to a depth from 2" below the plane of the top of the rails to the plane of the top of the ties and properly compacted. Surface grade blacktop will be placed to a depth from the plane of the top of the rails to the coarse grade blacktop and be properly compacted and rolled to provide a uniform surface at the elevation of the top of the rails. Flangeways 2" wide and 2" deep minimum will be provided along the gauge side of the rails. Should crossing timbers be used, they shall be of the proper size, fastened with lag screws and shall cover the full width of the crossing. Crossing timbers will be flush against the rail on the field side (outside). On the gauge side (inside) they will be 2" minimum from the edge of the rail. Adequate runoffs must be made where differences in elevation require. All debris from the crossing will be disposed of. Roadway shoulders should be graded and dressed.

METHOD OF MEASUREMENT: This item will be measured by the linear feet of crossing replaced.

NOTE: Drainage facilities may include filter cloth and/or drainage pipe depending on the merits of each individual crossing. If filter fabric is used below the tracks, the fabric shall be a minimum of 8 oz/sy for non-woven fabric and 6 oz/sy for woven fabric and be a minimum of 12" below the bottom of ties.

ITEM 10 - DITCHING

DESCRIPTION: This work shall consist of the removal of obstructions to the expected water flow and opening and restoring ditches that have been blocked or obliterated by slides, rubble, debris or other foreign matter.

WORKMANSHIP: All ditching contours should comply with the standard sketch for a typical track section as shown in Figure 1, Attachment 1. All materials cleaned from ditches must be disposed of in a proper manner. Depositing material that interferes with drainage from the track or may wash back into the ditch is unacceptable.

METHOD OF MEASUREMENT: This item will be measured by the linear feet of ditching completed.

ITEM 11 - BRUSH CUTTING

DESCRIPTION: This work consists of cutting brush and trees along the right of way for a distance of 10' back from each rail except at road crossings where, for a distance of 200' from each end of the crossing, the cut must be increased to 30' where possible or to standards set forth in 12 MRSA §9333 and §9405-A, whichever is greater. All brush shall be cut to a maximum height of 8" or to the machines capability from the ground. Overhanging brush and trees shall be cut to provide unobstructed clearance to a plane 22' above the rail. Cut brush and trees shall be removed from the right of way or mulched along the right of way.

WORKMANSHIP: Conditions hazardous to the safety of the workmen or others will not be created or left as a result of the brush cutting.

METHOD OF MEASUREMENT: This item will be measured by the linear feet of brush cut.

ITEM 12 - VEGETATION MANAGEMENT

DESCRIPTION This work consists of controlling vegetation by applying properly approved herbicide on the railroad right of way. The controlled area shall be between the rails and 12' from rail centerline. At road crossings, each quadrant shall have an additional controlled area, 12' to 25' (if possible) out from the rail and 150' ahead to 150' behind the crossing, and shall be controlled to maintain vegetation to less than 2' high; low growing vegetation should be permitted to remain for erosion control. Additional areas (such as signal boxes, signs, etc.) should be controlled as designated by the railroad representative. Where adjacent property owners maintain neat vegetation control up to the tie ends, the neat vegetation should not be sprayed. Brush encroaching the 12' vertical plane shall be controlled to prevent further encroachment.

WORKMANSHIP: Extreme care must be exercised to assure an approved herbicide is properly applied. The railroad representative shall have the vegetation evaluated to determine the proper herbicide(s) and application rates. The application shall be made by a certified and licensed pesticide applicator.

METHOD OF MEASUREMENT: This item will be measured by the number of acres or miles of railroad right of way controlled. An 8' wide swath for one mile is one acre. A copy of the certified pesticide applicator's license and Application Report shall be provided if requested.

ITEM 13 - TRACK CONSTRUCTION

DESCRIPTION: This work shall consist of the following:

- Preparation of the subgrade, including all clearing, excavating, filling and grading necessary for the placement of the railroad track.

- Furnishing, distributing and assembling all components of the railroad track. Description and workmanship in Items 1 through 11 applies where practicable.

- Placing a minimum of 6" of subballast in no more than 4" lifts. Each lift is to be compacted until there is no movement of material beneath compaction equipment.

- Placing a minimum of 6" of ballast below the ties.

- Final leveling and alignment of track.

MATERIAL: All materials shall conform to AREMA specifications.

WORKMANSHIP: Work shall comply with AREMA Specifications, workmanship as described in Items 1 through 11 and Figure 1, Attachment 1.

METHOD OF MEASUREMENT: This item will be measured by the track feet of railroad track constructed and accepted.